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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,681	07/13/2001	Kenneth John Davey	90017	4801
9355	7590	01/07/2005	EXAMINER	
ALLEN, DYER, DOPPELT, MILBRATH & GILCHRIST, PA P.O. BOX 3791 ORLANDO, FL 32802-3791			CYGAN, MICHAEL T	
			ART UNIT	PAPER NUMBER
			2855	

DATE MAILED: 01/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/905,681	Applicant(s) DAVEY, KENNETH JOHN	
	Examiner Michael Cygan	Art Unit 2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-7,10 and 29-52 is/are pending in the application.
- 4a) Of the above claim(s) 30-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-7,10,29 and 39-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) ✓ | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04 November 2004 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4, 5, 7, 10, 29, 39-42, 44-49, 51, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davey (US 5,770,794) in view of Haupt (4,344,320). Davey teaches the claimed invention, with the exception of using positive pressure (Davey teaches using vacuum). See especially Figure 1a, which shows the high flow impedance measurement apparatus, and Figures 4-5, which show monitoring of the integrity of the abutment between two structural elements having a joiner by placing a cavity in

communication with the (negative) pressure source. Constant (negative) pressure is used; see column 3 lines 14-15 and column 4 lines 43-48. Change in the pressure differential is measured; see column 3 lines 27-38. See also columns 3-4 and 6.

Haupt teaches a method of using a positive pressure of a gas (helium) through a high flow impedance measurement apparatus [14,15] and with a helium detector to measure leaks in a system; see entire document, especially columns 3-6 and Figures 3 and 7. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use positive pressure of a gas (helium) through a high flow impedance measurement apparatus [14,15] and with a helium detector to measure leaks in a system as taught by Haupt in the invention taught by Davey to form the leak detection, since Haupt teaches that the use of positive pressure of helium can work with a high flow measurement apparatus as well as provide the additional advantages of localizing the leak location and of additional alarming with an external helium sensor.

3. Claims 6, 43, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davey (US 5,770,794) in view of Haupt (4,344,320) as applied to claims 1, 39, and 46 in view of Schulte (US 5,390,533). The claimed invention is taught except for the provision of a moisture trap between helium source and cavities. Schulte teaches the provision of a

moisture trap [50] between a helium source [e.g., 42] and cavities in a system [10] and method for pressurizing a vessel for integrity testing with gas comprising reused and dried helium (see abstract and column 4, lines 14-48). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a moisture trap between helium source and cavities as taught by Schulte in the invention taught by Davey in view of Haupt to dry the entering helium gas, since this would remove water from the gas which could interfere with flow rate or mass spectrometric (Haupt analyzer [10]) measurements.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Positive pressure differential pressure measurements using a high flow impedance measurement apparatus are taught by Grace (US 2,430,122), Dega (US 3,188,855), and Schmidt (US 4,806,913). It is noted that Oertle (US 4,145,915) teaches the equivalent use of positive and negative pressures for use in structural leak detection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Cygan whose telephone number is (571) 272-2175. The examiner can normally be reached on 8:30-6 M-Th, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MICHAEL CYGAN, PH.D.
PRIMARY EXAMINER